

*nomyia* have only been found in the throats of *cervina*, those of the genera *Cephalomyia* and *Oestrus* only in *tylopoda* and *cavicornia*, those of the genus *Gastrophilus* in *solidungula* and *multungula* (*Rhinoceros*), but *Hypoderma*, on the other hand, in *cavicornia* (*Bos*, *Capra*, *Antelope*), *cervina* (*Cervus*, *Moschus*), and *equida*, *Cuterebra* larvae in *rodentia* and *marsupialia*, and finally those of *Dermatobia* in dogs, oxen, horses, and even upon man.

[p. 40] Another picture is formed if the perfect insects are divided according to a peculiar character into those with pectinate antennal bristles (*Cuterebra*, *Dermatobia*), and those with naked antennal bristles (*Hypoderma*, *Gastrophilus*, *Cephenomyia*, *Cephalomyia*), since the larvae of the former are parasitic in ungulate animals as well as especially in *rodentia* and *marsupialia*, but those of the latter only in *ungulata*. This hitherto so convenient and practical division likewise cannot

be relied upon for an inference, since *Oestrus leporinus* belongs to the group of *oestridae* with naked bristle, but its larva lives upon a rodent. It is seen that such divisions are only artificial and serve for orientation, but that nevertheless nature cannot be forced into them. Such divisions are therefore only temporary, and only too often become untrue so soon as new discoveries are published. It is therefore best to treat of the larvae according to their genera, and to limit these as naturally as possible, since it has thus far been found constantly in this family that the larvae of one genus all have a like life-history, and conversely the generic characters of the imagines can scarcely lead us astray if we wish to draw an inference as to the life-history of a larva perhaps not yet investigated. In the case of a new genus, however, we can infer its life-history with very little certainty. Experience alone teaches this.

WAXY SECRETIONS OF PSYLLID LARVAE. Dr. Franz Löw, in his "Beiträge zur Kenntniss der Jugendstadien der psylliden" (Verhandl. K.-k. zool.-bot. gesells., 1884, v. 34; Abh.), p. 144, thus describes a curious secretion in the larvae of *Psylla ulmi*: "From wax-glands surrounding the anus the larva emits a white secretion, which appears as a hollow, vermiform thread that allows the passage through it of the fluid excrement of the larva. This white thread, which reveals the presence of the larvae hidden in the axils of the leaves behind the stipules, elongates continuously, but breaks

off repeatedly on account of its own weight and consequently reaches no very considerable length. Furthermore this larva secretes from the wax-glands on the dorsal surface of the last abdominal segment extremely fine white threads, which form unitedly a very loose, light flock." The larvae of *Trioxa*, three species of which larvae are described in the same paper, have their entire outer margin surrounded by hyaline, silky, very fine, threads of wax, which lie close to one another, and seem to form a short, closely-trimmed fringe around them.